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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,755

11/29/2006

Roclof Marissen

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23117 7590 09/30/2010  
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EXAMINER

COLE, ELIZABETH M

ART UNIT

PAPER NUMBER

1782

MAIL DATE

DELIVERY MODE

09/30/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,755	<b>Applicant(s)</b> MARISSEN ET AL.	
	<b>Examiner</b> Elizabeth M. Cole	<b>Art Unit</b> 1782	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harpell et al, U.S. patent No. 5,135,804 in view of Ward, U.S. Patent No. 5,628,946 .

Harpell discloses a process for forming articles from polyethylene fibers. The process comprises providing drawn gel spun polyethylene fibers and applying heat at temperature of 100-160 degrees C, pressure of anywhere from 0.5-200 MPa for times which can vary widely and be as low as one tenth of a second up to twenty or thirty minutes. See col. 3, lines 15-63. The fibers have a denier of less than 1000, (see examples). The shaping process can be performed in a mold. The fibers can be in the form of a woven fabric, including plain, basket or satin weaves, or in the form of a triaxial weave which corresponds to the claimed multi-layered and three dimensional weaves. It is noted that the yarns are made up of a plurality of monofilaments. The denier of the 32 filament yarn employed in example 1 is 147, and thus, the denier of the individual monofilaments making up the yarn is about 4.6 which meets the limitations of claim 6. (See example 1 which states the yarn denier, number of filaments and that the filaments are monofilaments). With regard to claims 2 ,3 and 11 since Harpell et al teaches the claimed titre and teaches that i and j can be one, (i.e., teaches a plain weave), which is the preferred value set forth in the instant specification, (see paragraph 0014), the exposed fiber length necessarily meets the values set forth in

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claims 2 and 3. With regard to the limitation that the material is a prosthetic material and that the mold comprises a hollow mold and a plug, Harpell is silent as to these limitations. However, Ward teaches employing molded gel spun fibers as prosthetic materials such as hip joints. Therefore, it would have been obvious to one of ordinary skill in the art to have employed the material of Harpell to form artificial joints and other prosthetic materials and to have employed a mold having a suitable shape, such as a hollow mold and plug as claimed, in order to form the molded article into the desired shape.

3. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harpell et al in view of Ward as applied to claims above, and further in view of Harpell et al, U.S. patent No. 4,455,273, (Harpell 2). With regard to claims 5 and 6, Harpell does not disclose the claimed viscosity. However, Harpell discloses employing the particular polyethylene fibers of Harpell 2. The polyethylene of Harpell2 has the claimed viscosity. See col. 3, lines 1-10. Therefore, since Harpell teaches that the fibers of Harpell2 are suitable for use in forming the molded gel articles and those fibers have the claimed viscosity, it would have been obvious to have used the fibers of Harpell2 in view of the specific suggestion to do so in Harpell.

4. Applicant's amendment of claim 3 has overcome the objection to claim 3.

5. Applicant's amendment to the specification has overcome the rejection of claim 6.

6. Applicant's arguments filed 7/28/10 have been fully considered but they are not persuasive. With regard to the art rejection, Applicant argues that the article of Harpell

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et al '804 is not shaped but is flat. . However, Ward teaches employing molded gel spun fibers as prosthetic materials such as hip joints.

7. Applicant argues that the references do not teach forming the prosthetic joint directly from a woven fabric. However, Harpell '804 teaches that the fibers can be in the form of a woven fabric. Harpell '804 teaches every element of the claimed invention except that it does not teach the particularly claimed molding process wherein the mold comprises a hollow mold and a plug. Applicant argues that Harpell teaches transforming the woven fabric into a film and then further treating the film, not forming the prosthetic material directly from the fabric. However, the claims recite compressing the particularly claimed woven fabric made from the drawn gel spun fibers at the claimed temperature and pressure without a matrix material being present. Harpell teaches this same process and only lacks the teaching of the particular mold employed. Further, Harpell '804 at col. 3, lines 30-35, does not state that curved articles can only be formed in a two step process, but rather than once voids have been eliminated from between the fibers that the material can be further processed by stamping, vacuuming forming or similar operations. Similarly, at col. 4, lines 5-15, Harpell 804 discusses the different levels of pressure which are needed to form different materials. It does not state that to form any article from a fabric the fabric must first be formed into a film and then in a separate process formed into another article.

8. Applicant argues that none of the art teaches that during use involving sliding contact few particles are released with a size harmful for the human body. However,

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the claims do not include limitations about the lack of particles. Therefore, this argument is not commensurate in scope with the claims.

9. Therefore, the rejection is maintained.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

The examiner's supervisor Rena Dye may be reached at (571) 272-3186.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

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/Elizabeth M. Cole/  
Primary Examiner, Art Unit 1782

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